

REMARKS

The Office Action dated February 20, 2009, has been received and carefully noted. The following remarks are being submitted as a full and complete response thereto. Claims 1-9 and 19 are pending in this application and claims 10-18 are withdrawn. By this amendment, claims 1 and 9 are amended for clarification. Support for the amendment to claims 1 and 19 can be found in the Specification at, for example, paragraph [0009]. No new matter has been added. Reconsideration of the rejections of the claims is respectfully requested.

The Office Action rejects claims 1-9 under 35 U.S.C §112, first paragraph. The rejection is traversed.

The Patent Office indicates that Applicants have previously argued that the term "suppress" means "totally eliminate" and that Applicants have retracted this argument (Office Action, page 7, lines 11-15). The exact quote of Applicants' argument in the October 20, 2008, response from Applicant's argument in the March 12, 2008 response is: "Applicant notes that the Patent Office indicates that Applicants have previously argued that the term "suppress" means "totally eliminate" (emphasis added). Applicants did not argue that "suppress" means "totally eliminate," it is the Patent Office that assumed as such. Applicants argued that the term "suppress," as used in the Specification, conformed to the claimed feature of "removing an adhering film which has adhered to the interior of the reaction chamber without etching the catalytic body itself" (See October 20, 2008 response on page 7 and March 12, 2008 response on page 2).

As already argued, the term "suppress," as used in the Specification, conforms to the claimed feature of "removing an adhering film which has adhered to the interior of

the reaction chamber without etching the catalytic body itself." Furthermore, the verb "to suppress" is defined in Webster's Dictionary as "to reduce the incidence of severity" or "to hold back." Thus, it is eminently clear that the Patent Office's assumption that the term "suppress" means "totally eliminate" is wrong.

The claims, as currently amended to recite suppressing the etching of the catalytic body, fulfill the requirements of 35 U.S.C §112, first paragraph, and withdrawal of the rejection of the claims under 35 U.S.C §112, first paragraph is requested.

The Office Action rejects claims 1-9 and 19 under 35 U.S.C. § 103(a) as being obvious over Ishibashi (U.S. Patent No. 6,375,756) in view of Bridges (U.S. Patent No. 5,012,868) and Reale (U.S. Patent No. 5,451,754). The rejection is respectfully traversed.

In particular, the above-identified application claims a self-cleaning catalytic chemical vapor deposition apparatus that includes a power supply to apply a bias voltage to a resistance heated catalytic body, a changeover switch which changes the polarity of the bias voltage, and a cleaning gas, wherein the apparatus removes an adhering film while suppressing etching of the catalytic body itself when the cleaning gas comes into contact with the resistance heated catalytic body, and wherein the catalytic body has a temperature of between 1700 °C and less than 2000 °C, as recited in independent claims 1 and 19.

The Office Action alleges that the claimed feature of the catalytic body having a temperature of between 1700 °C and less than 2000 °C is "intended use" as long as the element is "capable of being heated," but the Office Action is mistaken. Given the fact that most things can be heated, the Office Action's assertion, if true, would result in the

invalidation of any claimed temperature in every single other patent application or patent. Such a statement is not supported in the MPEP or in any Federal Circuit decision. This statement appears to have been made up by the Patent Office in order to refuse to consider the claimed feature of a catalytic body having a high temperature. The Patent Office is asked to reconsider this statement, or to provide support in the law. Claiming an element that is heated to a range of temperature further defines that element and in no way constitutes intended use.

With respect to the claimed feature of the cleaning gas, the Office Action asserts that “[T]he structure of cleaning gas is not part of the apparatus structure” (emphasis added; Office Action, page 8, lines 10-11). It appears that the Patent Office is substituting its own opinion of the apparatus to the actually claimed apparatus. Determining what features to be claimed is within the exclusive province of the Applicant, not that of the Patent Office. Applicants are allowed to claim the cleaning gas, should Applicants choose to do so as long as the claims are definite. The Patent Office appears to interpret the claimed apparatus as being merely a catalytic chemical vapor deposition, but ignores that the claimed features are those of a self-cleaning apparatus that includes an affirmatively claimed cleaning gas.

With respect to the claimed temperature, the Office Action argues that ‘756 teaches that the hot element is heated up to 2000 °C or higher after the chamber is exhausted (Office Action, page 9, lines 1-4), with the implication that this is a teaching of operating at a lower temperature. The Office Action misses the following sentence in the Abstract that “[t]hereafter a cleaning gas...is introduced.” In fact, a more thorough examination of Ishibashi (‘756) reveals that Ishibashi teaches that it “is important in the

cleaning process that the temperature of the hot element be maintained at 2000 °C or higher (emphasis added; Col. 6, lines 18-26) and “the hot element must not be in contact with the reactive cleaning gas at the temperature lower than 2000 °C” (emphasis added; Col. 6, lines 27-32). Thus, Ishibashi clearly teaches away from having the catalytic body at a temperature between 1700 °C and less than 2000 °C during cleaning, as recited in independent claims 1 and 19. Thus, Ishibashi fails to teach these features of independent claims 1 and 19, and claims 1 and 19 are patentable over Ishibashi.

The Office Action relies on both Bridges and Reale to disclose or suggest a power supply to apply a bias voltage to the catalytic body and a changeover switch which changes the polarity of the bias voltage. Bridges teaches a method and apparatus for corrosion inhibition in an electromagnetic heating system for heating a portion of a mineral fluid deposit adjacent an oil well or other mineral fluid well, *in situ* (Abstract). Reale teaches a corona generating device for depositing a negative charge on an imaging surface carried on a conductive substrate held at a reference potential (Abstract).

Applicants submit that the combination of the teachings of Ishibashi with the teachings of Bridges and/or Reale is improper. Although the latest Supreme Court decision with respect to obviousness in *KSR int'l Co. v. Teleflex inc.*, No. 04-1350 (U.S. Apr. 30, 2007) indicates that must be an “apparent reason” to combine references to arrive at the claimed invention, the May 3, 2007 Memorandum from the Deputy Commissioner for Patent Operations clearly stipulates that “it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the

prior art elements in the manner claimed." In light of this statement, the Office Action did not identify a reason why an apparatus for corrosion inhibition in an electromagnetic heating system for heating an underground oil well, as taught in Bridges, should be combined to a CVD apparatus as taught in Ishibashi. There is no reason to combine the two references, other than in light of the teachings of the current application, which amount to improper hindsight reasoning.

Furthermore, neither Bridges nor Reale cure the above-discussed deficiencies in Ishibashi in disclosing or rendering obvious the claimed temperature range of independent claims 1 and 19.

For at least these reasons, a combination of the applied references fails to arrive at the subject matter of independent claims 1 and 19. Accordingly, claims 1 and 19, and dependent claims 3-9, are patentable over all of the applied references, and withdrawal of the rejection of the claims under 35 U.S.C. § 103(a) is respectfully requested.

Should the Examiner determine that any further action is necessary to place this application into better form for allowance, the Examiner is encouraged to telephone the undersigned representative at the number listed below.

In the event this paper is not considered to be timely filed, the Applicants hereby petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, referencing Attorney Dkt. No. 029567-00010.

Respectfully submitted,



Tarik M. Nabi
Registration Number 55,478

Customer Number 004372
AREN'T FOX LLP
1050 Connecticut Avenue, NW, Suite 400
Washington, DC 20036-5339
Telephone: 202-857-6000
Fax: 202-638-4810
CMM:TMN